

# COMMUNITY DESIGN

## *How Blacksburg Will Build Its Future*

### GOAL

Guide development in a logical manner while providing a livable and sustainable community through design that enhances Blacksburg's unique character.

### BACKGROUND

#### *Description*

A complex relationship exists between private development and public policy. A major goal of the town is to seek an appropriate balance between individual property rights and the community's goals. As with all development, private choices affect public policy concerning land uses, providing public facilities and services, anticipating transportation needs, and safeguarding the environment. Conversely, public policy affects housing location and costs through the provision of utilities, zoning, subdivision regulations, and building codes. It is vital that growth is guided appropriately to ensure that adequate public services are provided and proper transitions exist between land uses.

The town is committed to preserving its small town character and ensuring that new development enhances the quality of life. The effective implementation of land use and development standards is paramount to guiding new development to appropriate locations, while at the same time remaining true to the town's vision. Private interests, the physical impact of growth, and the public services required by future citizens create conflicts that require regulation and cooperation.

#### **Urban Design**

The Town of Blacksburg began in 1798 as a tiny village on the Virginia frontier. Designed on a gridded street pattern, the original Sixteen Squares formed the nexus of all future development. From this humble beginning, the town evolved into a complex environment that now incorporates many urban design variations. These variations include the older (pre-World War II) traditional residential neighborhoods; newer cul-de-sac, single-family residential neighborhoods; multi-family residential developments; downtown and other commercial corridors; University campus; research, professional office and industrial campuses; a walkable community; scenic views and rural landscape; and a high quality urban landscape.

### *Residential Areas*

Traditional residential neighborhoods dating from the early to mid-twentieth century are within easy walking distance from downtown. These historic areas should be protected, as acknowledged in the Historic Preservation chapter. For instance, the Miller-Southside neighborhood is built on a grid street pattern of parallel connecting routes centered on Draper Road, and located south of downtown. This area consists predominantly of upscale single-family homes, some dating from 1910. Architectural designs include craftsman, single story bungalows, larger foursquare bungalows, colonial revival, and half-timbered English cottage styles. Other traditional neighborhoods are located east of Main Street within blocks of the downtown commercial area. These neighborhoods include single-family cape cod and craftsman homes on small lots along streets designed with the gridiron pattern. These traditional neighborhoods are easily walkable, with sidewalks and multiple pedestrian routes. Similarly, the gridiron pattern also provides numerous routes for automobiles.



***Figure CD-1, Northside Park Neighborhood***

A number of post World War II suburban neighborhoods are located farther from downtown. These neighborhoods consist primarily of ranch style and neo-traditional homes located on large lots along winding streets and cul-de-sacs. Hethwood, south of Price's Fork Road, and the Woodbine-Wyatt Farm neighborhood, north of Mount Tabor Road, are both examples of suburban neighborhoods. The cul-de-sac street design provides fewer alternative routes for pedestrians and for automobiles; however, a number of greenway walking and biking trails provide residents with alternative, off-street transportation opportunities.

Neighborhoods comprised of multi-family housing dominate the Tom's Creek Road and the Patrick Henry Drive corridors west of North Main Street. These neighborhoods provide off-campus housing for students, as well as for young professionals. Numerous biking and walking trails, in addition to an extensive sidewalk network and a public transit system, encourage residents to use alternate forms of transportation.

Preserving the rural character of the Tom's Creek Basin, located west of the Route 460 Bypass, presents a special challenge for the town. This area contains the majority of the town's developable land and will be subject to intense development pressures as Blacksburg's population continues to grow. Current zoning requires that a majority of developed land remain as significant open space to maintain the town's rural atmosphere and to provide large contiguous expanses of green space.

Town policy encourages cluster development in Rural and Planned Residential Districts by allowing density bonuses for permanent dedications of significant open space with no net density increase for the town. Clustering single-family homes on small lots decreases infrastructure costs for the developer, and reduces local government maintenance costs. Furthermore, clustering has many other advantages such as preserving open space and agricultural land, protecting environmentally sensitive areas, helping to maintain view sheds, and reducing pollution.



*Figure CD-2, Cluster development*

Co-housing development is one form of clustering that is encouraged in future development. Co-housing is tightly clustered and focused on an internal pedestrian walkway, with automobile traffic and parking buffered and isolated on the periphery of the community. A common house provides space for community gatherings and shared meals. Environmental sensitivity and the preservation of open space are essential tenets of co-housing development.

### ***Residential Development Cost Comparison in 2001***

<b>Locality</b>	<b>Average Sales Price</b>	<b>Land Development Cost Per Lot <sup>1</sup></b>	<b>Devel. Cost as a % of Sales Price</b>	<b>Street Width (Min)</b>	<b>Curb &amp; Gutter</b>	<b>Sidewalks</b>	<b>Trails</b>	<b>Street Trees</b>	<b>Park land or Fee</b>
<b>Christiansburg</b> NRV Multiple Listing Service	\$126,046	\$11,196	8.9%	30 '	no	no	no	no	10% land
<b>Radford</b> NRV Multiple Listing Service	\$103,728	\$14,912	14.4%	32 '	yes	yes	no	no	no
<b>Roanoke County</b> Multiple Listing Service	\$138,250	\$13,243	9.6%	30 '	yes	no	no	no	no
<b>Montgomery County</b> NRV Board of Realtors	\$156,439	\$10,596	6.8%	18 '	no	no	no	no	no
<b>Blacksburg</b> NRV Multiple Listing Service	\$186,521	\$15,189	8.1%	30 '	yes	yes, 5 '	yes	no	10% land or fee
<b>Herndon</b> Century21 Spring Realty- Herndon	\$276,801	\$14,829	5.4%	30 '	yes	yes, 4 '	yes	yes	may require
<b>Leesburg</b> Dulles Association of Realtors, Multiple Listing Service	\$263,408	\$16,383	6.2%	36 '	yes	yes, 4 ' both sides	yes	yes	may require
This conceptual comparison is based upon development of an 18 lot, single-family residential subdivision, and is intended to provide general information. It should be recognized that individual site development costs in each jurisdiction might vary based upon the characteristics of the specific site.									
Development cost is the cost of providing streets, utilities, storm drainage, and other public amenities required by each locality's Subdivision Ordinance									

*Figure CD-3, Residential Development Cost Comparison in 2001*

### *Commercial Areas*

Blacksburg has incorporated pedestrian-oriented design features to encourage people to leave their cars and walk. The downtown business district adjacent to the Virginia Tech campus promotes a village-like atmosphere, and is enhanced by its pedestrian orientation. The relationship created between destinations on College Avenue, on South Main Street, and on Draper Road contributes to a strolling atmosphere. Additionally, the Bicentennial Greenway, which extends the Huckleberry Trail from the library to College Avenue, is a major pedestrian gateway into downtown. The Central Blacksburg Greenway is planned to extend this trail through Henderson Lawn and downtown, and will eventually connect with the Municipal Park and High School.

The continuous retail frontages close to the street encourage the pedestrian to continue walking by providing a visually stimulating environment. Similarly, the absence of wide parking lots and sweeping driveways, which interrupt the continuity of the streetscape, invite pedestrians to investigate the display in the next store window, or to discover what shops are around the next corner.

The quality of streetscape amenities such as street trees, pedestrian scale lighting and signage, as well as street furniture, adds to the pedestrian experience. Large street trees, hanging flower baskets, and other landscaping features create a sense of visual continuity and consistency that welcomes the stroller.



*Figure CD-4, Pedestrian Amenities*

Appealing building facades of varying architectural design and historical significance create an inviting, interesting, and attractive environment that can only be fully appreciated while walking.

The sizes of buildings fronting downtown streets are slightly taller than the streets are wide, thus creating an “urban” atmosphere and the sense of hospitable outdoor rooms. Buildings situated on sidewalks with parking located in the rear further enhances this effect, as well as endorses the idea of a community that values people before automobiles.

Town policy and practice encourages pedestrian-oriented design by requiring new commercial developments to locate parking behind the front building line, and also by eliminating front setbacks to place the structures closer to the street. The Collegiate Square shopping complex on Turner Street is an example of zero lot line development with rear parking.



*Figure CD-5, Rear of the Collegiate Square Shopping Complex*





*Figure CD-6, “New Town” as proposed in the Downtown Master Plan*

Mixing commercial uses on the ground floor with some residential uses on the upper floors further enhances street level vitality. This mix of functions contributes to street life vitality by combining visiting pedestrians with those downtown residents. Safety is an additional benefit of having more people downtown during non-business hours. The concept of “eyes on the street” argues that crime is reduced when people use a street or other public area for a greater period of time than during normal business hours. Moreover, the Cost of Land Use Study predicts a shortage of multi-family housing in the near future downtown and reinforces the town’s policy in support of mixed commercial/residential use.

#### *University Campus*

The Virginia Tech campus is separate from, yet integral to, Blacksburg’s urban design. Located predominately west and south of the town’s commercial and residential areas, the boundary between the university and the town is well defined. While the campus identity is distinctive from that of the town, there are few physical barriers between the two. The main campus consists of numerous multi-story academic, administration and dormitory buildings, clad in “Hokie Stone.” Large lawns and courtyards provide a predominantly institutional ambiance while separating the buildings. Citizens



*Figure CD-7, Henderson Lawn*

and students move freely between the campus and the town proper. The large Drill Field, Henderson Lawn, and various other lawns and courtyards provide ample public open space for the use of Blacksburg citizens. The Duck Pond and historic Solitude are unique public spaces easily accessible to pedestrians, cyclists and motorists. Moreover, the university's extensive agricultural research facilities add to the town's unique rural feel.

Appropriately, the older areas of Virginia Tech campus including the Drill Field, Henderson Lawn, and the VPI Mall are adjacent to the historic Blacksburg downtown commercial center. This area includes an eclectic mix of late nineteenth-century to late twentieth-century architecture. The W.C. Ellett building, constructed in 1900 and located at the corner of North Main and College Avenue, and the art deco Lyric theater are examples of the building styles that give this area its unique character. With many restaurant, service and retail shopping opportunities, and with residential apartments on the upper floors, the downtown commercial center provides an interesting and unique experience for citizens and visitors alike.



*Figure CD-8, the Lyric*

#### *Research, Professional Office, and Industrial Campuses*

Research and development, professional office and industrial parks are located predominately in the southern end of town. Consisting of groups of buildings in well-manicured, campus-like settings, these areas are intended to provide a healthy, balanced workplace environment.

The Virginia Tech Corporate Research Center (CRC) is the flagship university-related research park in the country. The park joined the invitation-only international technology network, *it-parcs*, in 2001 and is the first park to receive this international designation in the United States. When fully built, the CRC will contain at least 29 buildings and one million square feet of space. The center is home to over 110 tenants, consisting of private companies and various other research-oriented facilities devoted to genetic research, information technology, forest products development, meteorology and other disciplines, and employs over 1,775 people. Located south of the Virginia Tech airport and west of South Main Street between Ramble Road and the Route 460 Bypass, this evolving Research and Development campus is easily accessible by several modes of transportation. In addition, the CRC provides many opportunities for bicycle and pedestrian use and is connected to the town's greenway system.



*Figure CD-9, Corporate Research Center*



Professional office parks are located on either side of South Main Street providing an attractive gateway to the southern part of town. Consisting of one and two-story buildings on well-landscaped lots with parking located predominately behind the buildings, the office parks provide campus-like atmospheres for administrative and research professionals.

The Blacksburg Industrial Park, in the southeastern portion of Town, stretches almost 160 acres. The park contains 20 businesses that employ approximately 2,068 people. This park expanded its capacity in 1998 when the town adjusted its boundaries with Montgomery County. The park is located at the town's primary gateway, east of South Main Street and north of the Smart Road, with easy accessibility to and from the Route 460 Blacksburg Interchange. The industrial park is a major economic development tool for the town. Additionally, the town strongly encourages an internal bikeway/pedestrian system with connections to the greenway system.

#### *Walkable Community*

The primary functions of streets include moving a variety of traffic, providing thoroughfares for pedestrians, providing access for emergency vehicles, and accommodating parking. Streets are also important urban open space features. The streetscape – a combination of building facades, sidewalks, benches, lighting, trees, and other characteristics – influences the character of the surrounding urban environment to a great extent.



*Figure CD-10, Pedestrian Promenade along College Avenue*

Well-designed streetscapes focus on creating pedestrian-friendly environments and are essential to community preservation. Pedestrian promenades are effective in creating pedestrian-friendly areas for people to gather and walk. A streetscape's layout, quality, and appearance can largely determine whether a town appears safe and welcoming. For instance, wide streets that carry high volumes of traffic are hostile to pedestrians. The commercial corridor along the

four-lane undivided portions of South Main Street is an example of a wide, high traffic street that is not pedestrian-friendly.

South Main Street, and other similar streets in Blacksburg, became more pedestrian friendly with the implementation of several traffic calming techniques such as landscaped medians, traffic islands, and rumble strips. These additions can reduce the perceived width of streets, and are found on South Main Street and on Price's Fork Road. Crossing a wide, high traffic, street is less daunting where there is a median to provide sanctuary. Medians in a wide street provide pedestrians with the opportunity to cross the street in sections instead of all at once. Other traffic calming techniques that enable pedestrians and cars to coexist include purposely narrowing streets at intersections, brick paver pedestrian crossings, speed humps, and traffic circles. The town encourages all these design techniques.



*Figure CD-11, Pedestrian Design*

In addition to the public space along downtown and residential streets, ample public space is available on the Virginia Tech campus for resting, talking, strolling and interaction with others. Campus public space includes campus lawns, the Drill Field, the Duck Pond, and various walkway and courtyard spaces. In the town proper, small pocket parks near downtown also provide space for contemplation and rest. The gazebo in



*Figure CD-12, Duck Pond*

Bicentennial Square, between the Police Department and the Municipal building, is a fine example. Benches and gazebos are also located at intervals along the Huckleberry Trail and Bicentennial Greenway for strollers to rest.

#### *Scenic Views and the Rural Landscape*

In March 1992, town staff and citizens began an open-space planning process, which culminated in a report adopted by Blacksburg Town Council on June 14, 1994. Portions of that report are excerpted in three chapters in this comprehensive plan: *Natural Environment and Open Space*, *Parks and Recreation*, and here in *Community Design*.

The community appearance concerns identified in the report, and still relevant today, are as follows:



Protect Scenic Views. Comments from the citizen participants focus on the need to preserve the scenic beauty of Montgomery County, including its mountain views and numerous vistas. Threats to this resource include insensitive and incompatible development, inconsistent regulations, pollution and litter, and lack of appreciation for scenic beauty.



*Figure CD-13, Open Space*

Preserve Rural Community and Landscape. The small town and rural character of the community is a major asset. Additional special characteristics identified include the quietness of the area, its remoteness, the scattered village centers, farmhouses, isolated homes, open land scattered with forests, and livestock.<sup>1</sup>

Protect and Enhance Natural Stream Systems. Blacksburg has seen its ponds and streams from early times intertwined with the history of local issues. Water sources were thought to be purely functional but in many instances were considered aesthetically significant and so designated to enhance town and university sites.<sup>2</sup> Significant water sites are the Virginia Tech Duck Pond, Shadow Lake, Hethwood Pond, Stroubles Creek, Tom's Creek, Spout Spring, and College Spring.

Many streams have been buried over time, in spite of their environmental and aesthetic benefits. These natural water features should be unpiPED as redevelopment occurs on campus, downtown, and throughout Town where feasible. Many of the significant water sites listed above are impaired or seriously impaired as determined by the Department of Environmental Quality, and some are currently of marginal quality. New development should be extremely sensitive to construction close to streambeds, and additional piping of streams is strongly discouraged. This issue is also discussed in the *Natural Environment and Open Space*, *Downtown*, *University*, and *Midtown North* chapters.

#### *Urban Landscape*

The town's landscape program was initiated in 1984 in response to citizen requests to beautify Blacksburg. Initially, the program included the design, installation, and maintenance of flowerbeds in street medians and around a few public buildings. In the last fifteen years, the program has expanded to include the design, renovation, and maintenance of landscapes around all public buildings, as well as the design and maintenance of hanging baskets on Main Street. The program also manages weeds growing in sidewalks along main thoroughfares and turf grass weeds on Town properties such as in medians, in the town cemetery, and around the municipal building.

---

<sup>1</sup> Open-Space Planning, An Initiative for Our Future, Montgomery County and Town of Blacksburg, June 1994, p.11, 12.

<sup>2</sup> Town Architecture, Town of Blacksburg, *op.cit.* p.58.

Civic organizations, garden clubs, businesses and other interested individuals donate money each year to fund flowerbeds through the Sponsored Flowerbed Program. This program involves youth groups, master gardeners, garden clubs, civic organizations, and individuals who help plant landscaped areas and flowerbeds. Citizens have even helped design landscapes along South Main Street, at the town hall, and at the town-owned Price House and garden.



*Figure CD-14, Flowerbed*

The Town of Blacksburg is committed to maintaining its urban forest. The town has been designated a Tree City USA for ten consecutive years and has received the Tree City Growth Award twice since the program's inception in 1992. These awards are presented by the National Arbor Day Foundation in cooperation with the National Association of State Foresters and the USDA Forest Service to reward outstanding tree care and to recognize environmental improvement. The town has received grants from the Small Business Administration and the America the Beautiful program to fund a townwide tree inventory, the Nellie's Cave Arboretum, the industrial park tree planting, and a town tree replacement program.



*Figure CD-15, Trees at Westover Park*

The preservation of existing trees and vegetation, as well as the planting of new trees and vegetation, can significantly add to the quality of the community's physical environment. Trees can provide the following benefits:

- ◆ Create buffers and screens against noise, air pollution, and unsightly and incompatible land uses;
- ◆ Stabilize soil and replenish groundwater supplies, thereby reducing flooding hazards and controlling erosion and storm water runoff;
- ◆ Act to moderate temperature extremes and provide shade;
- ◆ Absorb carbon dioxide from and supply oxygen to our atmosphere, which are essential ecological functions crucial for preserving human and animal life;
- ◆ Provide a haven for birds which, in turn, assist in controlling insects;
- ◆ Aid in energy conservation; and
- ◆ Are physiologically, psychologically, sociologically, and aesthetically necessary counterpoints to the man-made urban setting.

An integral part of landscaping is the establishment of buffers to ease the transition from one type of land use to another. Buffers also limit the view and reduce the noise between incompatible uses. They provide a physical integration of uses that promotes the public's health, safety, and welfare by:

- ◆ Preventing visual pollution;
- ◆ Preventing the overcrowding of land;
- ◆ Preventing the undue congregation of people and vehicles; and
- ◆ Promoting the peaceful enjoyment of property within the town.

A reforestation project has begun at The Hill Golf Course and will be implemented in parks throughout Blacksburg in the near future, in accordance with the Parks Master Plan.

Trees are maintained by town staff in medians, parks, along bike trails, on the town golf course, and on public properties according to a four-year rotation schedule. Citizens have an obligation to maintain their own trees and shrubs to allow for a 14-foot vertical clearance over roadways and to maintain an 80-inch vertical clearance over sidewalks abutting their properties. In addition, to enhance visibility, vegetation within 15 feet of an intersection must be maintained at a height no greater than three feet. In an attempt to reduce complaints, to respond to citizens' needs, and to handle safety issues, the town has employed a contractor since 1996 to prune limbs in violation of Town ordinances. The contractor works in a different quadrant of Town each winter to eliminate violations. In addition, Town crews prune sight violations as time allows.



*Figure CD-16, Trees at Nellie's Cave Park*

Town staff and contractors prune trees along Main Street and College Avenue in the downtown area yearly to maintain the correct vertical clearance, as well as to maintain the allowable building clearance.

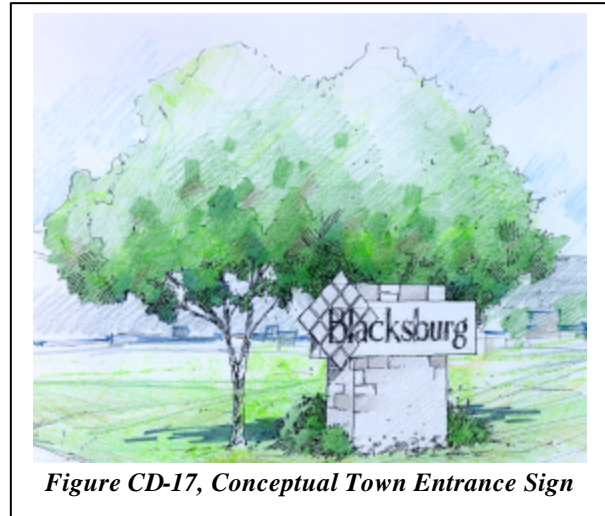
Citizen involvement in the Urban Forestry program is critical. Citizens may donate funds for tree planting in parks, and they may also arrange to have balled and burlapped Christmas trees collected and planted in Town parks. Citizens also help to plant trees throughout the year, as well as at the town's Earth Day and Arbor Day celebration. Since 2000, plantings at the Earth Day and Arbor Day Celebration have focused primarily on the Brown Farm park site.

Another important aspect of urban landscaping is the use of grass pavers for driveways and parking areas. The successful use of these pavers will reduce the visual impact of hard surfaced areas, and more importantly, they will reduce stormwater runoff. This kind of surface allows water to seep into the ground

rather than be channeled into the stormwater system. Other alternative, porous pavement materials can also reduce runoff. Developers, businesses, and homeowners are encouraged to use these alternative materials to reduce the negative impacts of runoff.

### Gateways and Corridors

"An entrance to a town is the initial gesture of welcome. It is like a well-hung gate or a neatly trimmed hedge in front of a well kept home. The entrance to a town should reflect the care and quality of the environment within."<sup>3</sup> Blacksburg has five primary gateways: South Main Street at the Route 460 Blacksburg Interchange, Harding Avenue at Roanoke Street, Prices Fork Road at the town boundary line, Prices Fork Road at the Route 460 Bypass interchange, and at North Main Street and the Route 460 Bypass intersection. The Tom's Creek Road interchange at the Route 460 Bypass will become another major gateway into Town.



*Figure CD-17, Conceptual Town Entrance Sign*

"Principal paths should have some distinct or unique qualities to provide continuity. Since these streets constitute the most heavily traversed and the most noticed structures of Blacksburg, particular attention should be paid to their landscape development. If the city [sic] wished to pursue a landscape policy which provided the greatest visual impact for the greatest number, intervention along these paths would be an effective strategy. Ideally, that should involve mature tree lined streets and boulevards."<sup>4</sup> As part of this 1985 study, citizens were asked to draw from memory the key features of the town. The following are the most recognized corridors:

---

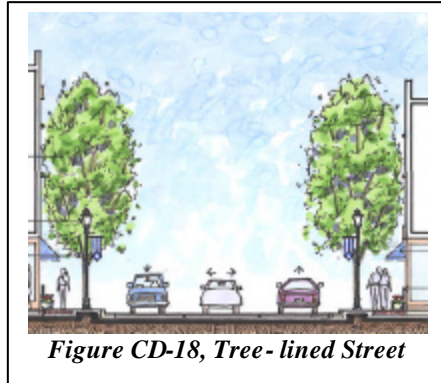
<sup>3</sup>Town Architecture, Town of Blacksburg, College of Architecture and Urban Studies and the Extension Division VPI &SU, Donna Dunay coordinator, 1986, p.44.

<sup>4</sup>Landscape Policy and Planting Guidelines, Landscape Architecture Program VPI&SU, Vincent J. Bellafiore, c.1985, p.40.



#### *Primary Gateways and Corridors*

- ◆ Main Street
- ◆ Prices Fork Road
- ◆ Route 460



#### *Secondary Gateways and Corridors*

- ◆ Tom's Creek Road
- ◆ Patrick Henry Drive
- ◆ Harding Avenue
- ◆ Progress Street
- ◆ College Avenue
- ◆ Draper Road
- ◆ Washington Street
- ◆ Church Street
- ◆ Roanoke Street
- ◆ Glade Road

Another gateway into Town is the Virginia Tech / Montgomery Executive Airport. This regional airport provides an entrance for corporate jets, personal aircraft, and helicopters.

Aesthetic features such as signs, the location and design of parking areas, landscaping, and open space affect the visual quality of entrance areas and corridors. A variety of informal and formal measures are available to address the needs of these corridors. These methods range from the Virginia Department of Transportation's Adopt-A-Highway program to neighborhood cleanup drives and entrance area landscaping. The Town of Blacksburg's program, "Adopt a Blacksburg Spot," was conceived in 1990. Recently renamed "Adopt-a-Park," this program allows residents to participate in a local litter control and beautification program that is intended to beautify the town while enhancing community spirit and pride. Interested groups and individuals have the opportunity to adopt parks, bike trails, streets, bus shelters, and other public areas. Groups can pick up litter, paint equipment, plant trees, and perform other tasks. Participating groups have included student organizations, homeowners associations, church groups, fraternities, sororities, and scouting groups.



### *South Main Street /*

### *Route 460 Blacksburg Interchange*

The interchange project at the south end of Town will include extensive landscaping and beautification at one of Blacksburg's primary gateways. The Department of Transportation included funding for landscaping materials for the project. A coordinated landscape design will link the interchange landscaping with current South Main Street landscaping.



*Figure CD-20, Construction of the Blacksburg Interchange*

### **Utility Design**

Aesthetically, the unattractive appearance of above ground electric, telephone, and cable television lines are of primary concern. For safety and maintenance reasons, new developments are required to place all utilities underground. Existing above ground utilities are costly and difficult to place underground, and often the town must subsidize their relocation. The extent and location of overhead utilities are more fully discussed in the *Utility Services* chapter of this plan.

The increased use of wireless technology requires the construction of many new telecommunications facilities throughout the town and in adjacent areas in Montgomery County. The importance of this technology for the future of the town and region is discussed further in the *Information Technology* chapter. The town encourages companies to develop new and innovative ways to provide these wireless services by constructing low-impact facilities. These facilities should always seek out every opportunity to co-locate on existing structures. These locations may be public structures such as water tanks, light or power poles, or private buildings and structures. These facilities should be inconspicuous in nature. Therefore, citizens would not be able to reasonably differentiate between an existing structure and the facilities integrated into them. Other options for placement would be flagpoles, treetops, and church steeples.

In conjunction with Montgomery County and other New River Valley localities, a regional approach to telecommunication and broadcasting facilities has been developed. This regional approach was initiated by Montgomery County to help local governments address the increasing demand for wireless facilities and their associated towers. The key items that are addressed in this regional approach are:

1. Uniform definition and approach to **co-location**;
2. Uniform and consistent **notification** procedures;
3. Uniform approach to **siting** of new towers;
4. Uniform **mapping** of tower sites;
5. Consistent use of **consultants** to assist jurisdictions in review of requests.

1. **Co-location** refers to the siting of new antennas, microwave dishes, etc. on existing structures. This allows for the "highest and best" use of existing structures and sites that could eliminate the need for construction of a new tower structure in an inappropriate area. Potential sites that provide co-location possibilities include, but are not limited to, the following:

- Existing telecommunication or broadcasting towers
- Buildings
- Water tanks and other public facilities
- Electric transmission towers
- Signs
- Parks and ball field lights
- Industrial parks

The Counties of Montgomery and Pulaski, City of Radford, and Towns of Blacksburg and Christiansburg encourage the above type of co-location efforts when placing wireless communication facilities in their localities (See *Figure CD-17* for potential sites in Blacksburg).

The Town of Blacksburg allows antennas on existing structures by right, if under 10 feet, in an effort to maximize the industry's availability and to eliminate the reliance on a few, tall towers.

2. **Notification** of intent to construct a telecommunication or broadcasting facility refers to the written notification required for public hearings pursuant to Section 15.2-2204 of the Virginia Code. In addition, the Counties of Montgomery and Pulaski, City of Radford, and Towns of Blacksburg and Christiansburg have agreed to provide written notification to the Planning Commission of each jurisdiction upon receipt of a request for a new communication tower to allow for review and input from neighboring jurisdictions. Comments received from each jurisdiction will be considered by the jurisdiction having authority over the request during the public hearing process.
3. **Siting** of new telecommunication or broadcasting towers in a jurisdiction should be reviewed for their potential effects on surrounding jurisdictions as well as the jurisdiction in which the structure is to be located. Newly constructed towers should be built in locations that will provide the least negative impact to the citizens of each jurisdiction. The Town of Blacksburg encourages the use of "stealth towers" for new sites that require new construction or "new builds."

The following locations are listed from most to least preferable when considering the siting of a telecommunication or broadcasting tower:

1. Property zoned Industrial, Research and Development, or University
  2. Property zoned General Commercial
  3. Property zoned Downtown Commercial
  4. Property zoned primarily for high density residential uses
  5. Property zoned primarily for low density residential uses
  6. Agricultural, Conservation, or Ridgeline areas
4. **Regional Map** - Each jurisdiction has agreed to contribute information necessary to compile a regional map showing all tower/antenna sites and providers using those sites within each jurisdiction. This will allow each jurisdiction access to current information on tower location to better assess the possibilities for alternative sites. This map may also include all government owned property that may be available for co-location opportunities.
5. **Consultants** may be used from time to time by the jurisdictions to evaluate the possible alternatives and potential impacts of the request on the jurisdiction and the surrounding areas. Wherever possible, the jurisdictions will share resources and collaborate on the request to provide the most beneficial and economically feasible use of a consultant.



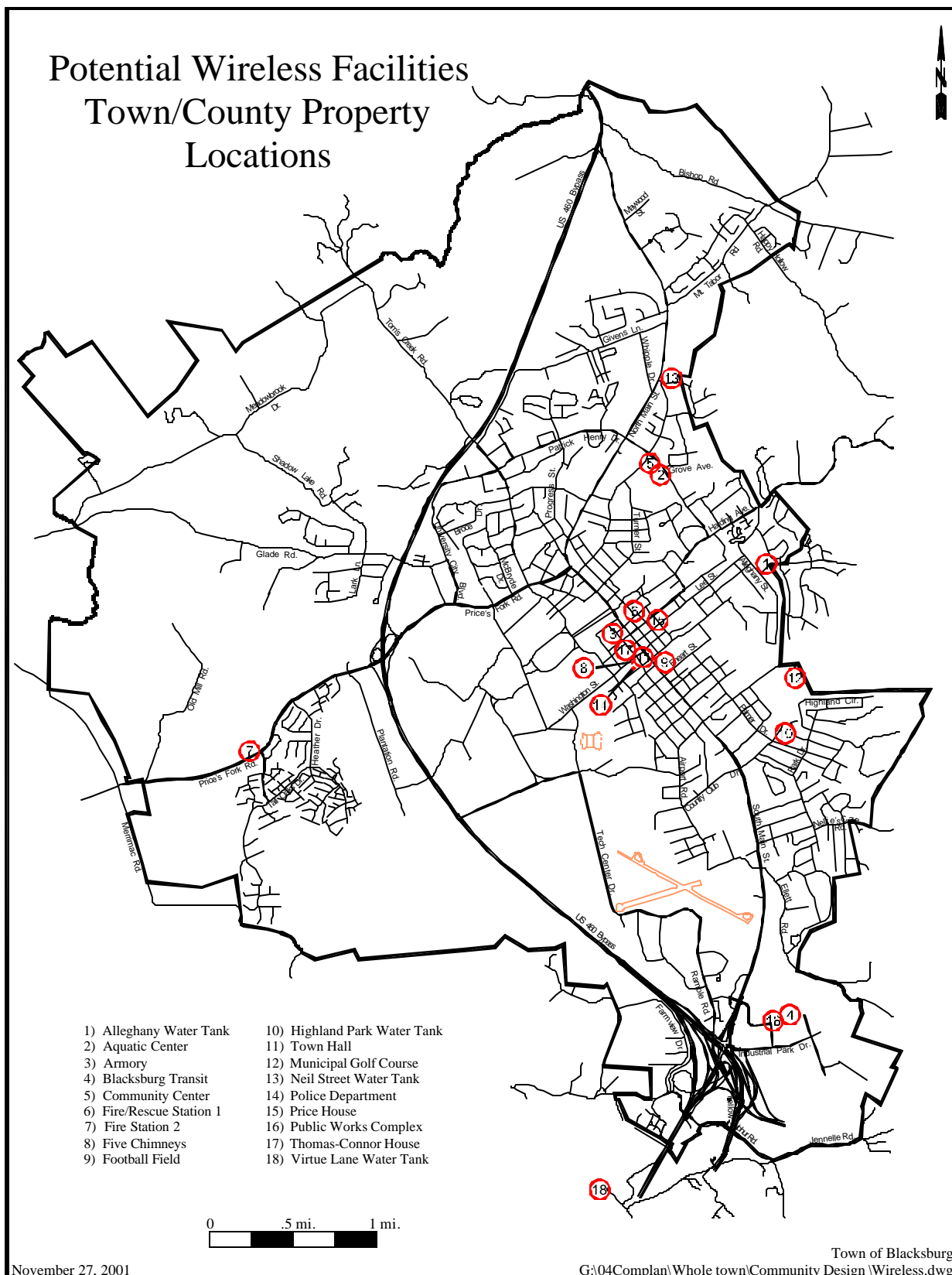


Figure CD-21, Potential Wireless Facilities Town/County Property Locations

### **Downtown Master Plan**

The town completed a master plan for the downtown, [Rediscovering the Heart of Blacksburg](#), in 2001 that promotes a progressive, economically strong and diverse, pedestrian oriented central business district. It began with a rigorous community interaction process that included individual and stakeholder interviews, and meetings with the Downtown Advisory Group steering committee that encompassed representatives of the business community, active community groups, Virginia Tech, and the Town of Blacksburg. This process culminated with a town hall meeting designed to garner input from Blacksburg citizens. The master plan embodies the community's vision for the downtown.

The six main strategies in the plan are for Downtown Blacksburg to be:

- ❖ *An Authentic Town Center*
- ❖ *A Specialty Shopping Destination*
- ❖ *A Regional Cultural District*
- ❖ *A Welcoming Place for Visitors*
- ❖ *A Mixed-Use Neighborhood*
- ❖ *A Partnership for the Future*

The following projects warrant immediate attention and can be implemented in the short term with little capital expenditure.

- ❑ The creation of *Blacksburg Events Non-Profit* and the hosting of events in the downtown. This step will do more to get people acquainted (or re-acquainted) with downtown Blacksburg than perhaps any single project could.
- ❑ Developing a parking management strategy will be one of the more difficult but rewarding programs that need to be implemented. This cannot happen without the cooperation and active participation of downtown merchants and property owners. A Town government led effort with no support will not succeed. The merchants must team with the town to make this project work and be willing to experiment with some alternative strategies before giving up on a permanent solution.
- ❑ Crosswalks and wayfinding, from a capital budget standpoint, will be the most important short-term implementation projects. Directions to parking, the Farmers Market, the Lyric, and other downtown amenities should be a top priority downtown. Simple painted crosswalks will also go a long way toward creating a more pedestrian friendly environment.
- ❑ Hosting a development summit will be an excellent way to begin to understand the specific needs and complexities of doing development in a downtown setting in Blacksburg. This should take place soon both to communicate the goals of the master plan and to share concerns about the development process downtown.

Other specific implementation actions include:

- Integrate residential dwellings into the downtown commercial area to establish a substantial population base within this central area of Town.
- Develop a pedestrian-oriented streetscape with limited building setbacks, appropriate pedestrian amenities, and parking facilities appropriately screened and located.
- Provide continuity of and a strong identity with the streetscape.
- Create a downtown parking/residential/retail complex that would increase the supply of parking for the patrons of downtown businesses or attendees of cultural events.
- Construct traffic calming improvements and streetscape enhancements to improve Main Street's pedestrian orientation in the downtown area.
- Provide adequate surface parking in the area for employees and community users.
- Centralize waste and recycling collection areas for downtown businesses.
- Partner with Virginia Tech to develop a regional fine arts center that will diversify and strengthen Downtown Blacksburg.
- Recommend future expansion of the municipal complex through acquisition of property along Washington Street at the southwest corner of Draper Road, and also the commercial block southeast of the town hall fronting on Draper and South Main Street. Integrate this urban design concept with properties across Main Street.
- Provide a park theme along the Draper Road frontage that incorporates the historic Thomas-Conner and Five Chimneys houses. Preserve/protect the streambed through the park area and extend the Bicentennial Greenway to the Blacksburg Central Greenway.
- Develop a green corridor along Miller Street or along Clay Street spanning between South Main Street and the library.

All major issues, goals, strategies, and implementation actions suggested in Rediscovering the Heart of Blacksburg are discussed in detail throughout this comprehensive plan, particularly in the *Economic Development*, *Transportation*, *Community Facilities*, and *Downtown* chapters.

### **Downtown Beautification**

The master plan strongly recommends physical improvements for street and sidewalk designs, parking lots, the Farmer's Market, and coordinated themes for signs and banners, among other suggestions. Proposed designs concentrated on restoring the original character of the town by using early 1900s-style streetlights, adding awnings, and making trees and watercourses an important part of the streetscape. To



*Figure CD-22, Downtown - College Ave*

date Blacksburg's beautification process has included the installation of brick pavers, benches, decorative lighting, and trees throughout the downtown area.

The project began in the mid-1980s along Main Street. The theme has expanded to include College Avenue, the Progress Street parking lot, the Armory and Draper Road parking lot, and most recently the Church Street parking lot and the alley adjacent to the Farmer's Market, perpendicular to Main Street and Draper Road. Property owners may also support the beautification effort by participating in the town's cost share program. Through this program, property owners can purchase benches, trees, and bricks needed for the designs created by town staff. Town crews then install the materials.

The downtown area is festive during many seasons. Trees and light poles along Main Street, College Avenue, and the Farmers' Market awning are decorated for Christmas, and colorful flags are hung from lampposts for many special occasions. Each summer the Steppin' Out festival is held in downtown Blacksburg, and the proceeds are used to maintain the economic vitality and aesthetic image of the downtown area.

At a minimum, litter and trash is picked up weekly by town staff from downtown sidewalks and parking lots. A litter vacuum often assists in this process. In addition, sidewalks in the downtown area are also pressure-washed to improve the appearance of this unique area of Blacksburg.

### *Opportunities*

- ◆ There is a good supply of professionals, technical information, and expertise available in Blacksburg.
- ◆ Several studies and inventories of historic properties have been conducted on both structures and sites in Town. (e.g., Blacksburg Town Architecture, Understanding a Virginia Town, by Donna Dunay, 1986 and Blacksburg, Virginia Landscape Policy and Planting Guidelines, by Vincent J. Bellafiore, c. 1986)
- ◆ The Cost of Land Uses Study, Economic Development Study, and the Downtown Master Plan commissioned by the town in 2000, make recommendations supporting the criteria outlined in this chapter.
- ◆ A Town horticulturist coordinates public landscaping and maintains plantings.
- ◆ The Historic or Design Review Board (HDRB) provides an ideal forum to review architectural guidelines within Planned Residential and Commercial, Downtown Commercial, Industrial Park, and Historic Overlay Districts.
- ◆ There is general community support for planting and maintenance of street trees and civic landscaping.



- ◆ Blacksburg is an attractive community with a "college town" appearance and atmosphere. Downtown infrastructure improvements to sidewalks, lighting, and crosswalks add to this feeling.
- ◆ There is a network of civic institutions within walking distance of the center of Town.
- ◆ The Blacksburg Downtown Master Plan resulted in excellent design concepts to guide downtown development, including the municipal complex and other needed town infrastructure.

### *Challenges*

- ◆ Development of commercial areas, apartment complexes, and subdivisions that is insensitive to good planning and engineering practices (e.g., strip commercial development, visually unappealing duplexes and apartments, inefficient design, etc.).
- ◆ Poor property maintenance and over-occupancy in dwellings plague some areas. The latter challenge contributes to the damage of historic structures through overuse and increased demand and stress on parking, streets, and utilities.
- ◆ Some areas suffer from poor maintenance of landscaping. Town ordinances require the planting of landscape materials, buffers, and screenings that must be maintained in conformance with the approved site plan and zoning regulations.
- ◆ There is a lack of open and natural streams, particularly in the developed portions of Town.
- ◆ Some structures are built with little sensitivity to their context within the surrounding environment. The town does not require architectural design review except when established by the approved conditions of a rezoning or special use permit, or at the request of Town Council.
- ◆ There is difficulty in seamlessly integrating old and new development.
- ◆ Telecommunication facilities are not restricted by corporate boundaries and, until recently, there was no uniformity or consistency in regulating telecommunication towers in the region. Towers in the county can have a potentially adverse impact on Town citizens.

## *What is Changing*

**The town's population is projected to grow at a steady rate in the near future, and consequently, there is a need for more multi-family zoned property.** Without more property designated and planned for this higher density, single-family neighborhoods may see an increased infiltration of rental property.

**The increase in demand for wireless technology is only beginning, and pressure is increasing to construct more facilities.** The town should work with adjacent jurisdictions to establish a regional approach to address this technology. The goal is to benefit from this technology without polluting regional view sheds.

**Developers are starting to design innovative communities that require parcels to be rezoned to the planned residential zoning classification.** These innovative designs, however, are coming under fire by neighbors, and requests are withdrawn in favor of by right developments. Developers are also starting to realize that they cannot avoid highly organized pressure from neighborhood groups. Consequently, communication is beginning before any applications are submitted to the town. The goal of this neighborhood collaboration is to produce a quality product that is better accepted by the community.

**The town is investigating the most effective public wastewater treatment system to install in the Tom's Creek Basin.** The installation of this system will result in increased development pressures in this area of Town. In addition, it will provide an opportunity for different styles of development.

## **GENERAL POLICIES**

- ❑ Preserve and enhance Blacksburg's unique identity and small town character.
- ❑ Encourage cluster development and preservation of open space.
- ❑ Encourage neo-traditional type development.
- ❑ Enhance the town's pedestrian friendly environment.
- ❑ Protect significant historic properties; promote their rehabilitation and use.
- ❑ Expand and protect the urban forest and landscape.
- ❑ Protect the integrity and quality of forested areas as buffers, habitat, and pollutant removal systems, and ensure the retention of existing high-quality trees and woodlands and the planting of new trees during land development.
- ❑ Protect scenic views, rural community atmosphere, and landscape character.

## **ACTION STRATEGIES**

### ***in general***

- Maintain order and cleanliness within the community.
- Maintain and enhance gateways leaving and entering the town to ensure a positive identity. Options include utilizing banners, landscaping, and signage.
- Encourage developers to build quality developments that represent the community's desire to protect and enhance the natural environment. (e.g., preventing strip commercial development, guidance manuals illustrating the style and scale of development compatible with various neighborhoods, etc.).
- Support programs which foster community pride such as initiatives to enhance community appearance (e.g., the Townscape committee's civic beautification awards).
- Encourage maintenance of unkempt areas by proactively enforcing existing building maintenance code and trash and weed control ordinances.
- Facilitate the replacement of current overhead facilities with underground lines.
- Maintain the inventory of significant trees on Town properties and rights-of-way.

### ***within 5 years***

- Develop a regional master plan for telecommunication technology.
- Establish a voluntary review process with an architectural advisory committee, with incentives for developers to comply with recommendations. Incentives could include density bonuses for approved architectural styles.
- Develop street lighting standards/guidelines appropriate to the character and needs of varying areas of Town.
- Improve downtown furniture to provide a uniform, dignified, and sturdy enhancement that promotes a pedestrian feel and flow.
- Educate the community regarding the history of the town and the potential economic benefits of heritage tourism that can result from historic preservation.
- Develop a replacement schedule for maturing trees on Town properties.

- Include in the Capital Improvements Program a priority list for open-space acquisitions. As funds are available, appropriate public purchases can be undertaken in an orderly manner, and community groups can organize efforts to support a directed acquisition strategy.
- Establish and work with conflict resolution groups in neighborhoods with high percentages of resident students to encourage property maintenance, yard maintenance, and after-party clean-up efforts.
- Improve Draper Road with landscaping, lighting, and street furniture to enhance its appearance and economic viability.
- Improve primary gateways to the downtown and university including a landscaped traffic circle at the Mall Drive and Main Street.
- Develop a promenade along College Avenue by creating a large walkway and a seat-wall along Henderson Lawn that would serve as a Town plaza (See *Figure CD-10*).
- Develop and distribute an educational brochure to the public on tree care and proper planting techniques.
- Promote rehabilitation of rundown areas by enforcing building maintenance code and by providing tax incentives for rehabilitated properties.
- Require large group homes, such as fraternities and sororities, to arrange for dumpsters for their trash.
- Enact Zoning and Subdivision Ordinance provisions to facilitate cluster development, including co-housing projects.
- Enact Zoning and Subdivision Ordinance provisions that encourage and support neo-traditional development.

### ***within 25 years***

- Complete implementation of the Downtown Master Plan.
- Seek state legislation that would increase funding for open space and parkland acquisitions.
- Develop an urban forestry plan that includes standards and specifications for directing maintenance schedules and allocating urban forestry resources.